Michigan Senate Committee on Education
Hearing on Mathematics Content Standards

Lansing, Michigan
April 26, 2016

Good afternoon, my name is Valerie Mills. I am a Mathematics Education Consultant at Oakland Schools where I support the work of about 10,000 teachers and a quarter of a million students. I began my career in Ypsilanti where I taught high school mathematics for nearly 20 years. In addition, I currently serve as the Immediate Past President of the National Council of Supervisors of Mathematics. In my role with the national council, I work regularly with mathematicians and mathematics education leaders across the country. Both my local work and national office have required me to develop a deep understanding of the Common Core State Standards and the many implications they have for our teachers, schools, and most particularly, our students.

One of the most dramatic, unexpected, and rarely referenced implications of the adoption of the Common Core State Standards (CCSS) by Michigan and currently, 42 other states, is the way in which this *shared* set of educational goals has drawn teachers and university educators together into a rich array of collaborative activities to meet what is now seen as a common challenge. To illustrate this phenomenon, I would like to share two stories of collaborations that suggest the degree of acceptance these standards enjoy in Michigan and across the country and how continuing to participate in the collective use of these standards can be leveraged for Michigan's teachers and students.

The first story is that of an initiative to develop K-12 CCSS aligned curriculum materials for our districts. While it began in Oakland in 2010, it quickly blossomed into a statewide MAISA collaborative involving hundreds of districts and teachers, who have invested thousands of hours, working together to develop K-12 CCSS aligned curriculum materials. During a working session, one of the teachers in a fourth grade group raised a question about *how* student's understanding of measurement concepts is likely to develop during the elementary years. Until recently the answer to her important question would only have been found scattered across multiple studies in various research publications. However, the broad adoption of the CCSS has prompted working groups of university faculty from across the county to begin to synthesize research on topics such as this, into a number of free online resources organized around these standards for teachers. Accessing these new resources online, our fourth grade teacher and her colleagues, had immediate access to multiple

sources of relevant, well-vetted research to help them answer their questions.

In this story you hear about two important levels of collaboration that are already producing results, one at the state level among teachers and one nationally among academic faculty, *both* directly enabled by the presence of these common standards. The result of these local and national collaborations is that teachers come away smarter about teaching and learning, with their students as the ultimate beneficiaries.

The second story comes from one of the national boards I joined as President of the National Council of Supervisors of Mathematics, the Conference Board of Mathematical Sciences (CBMS). This group is composed of the presidents of America's 16 national mathematics and mathematics education associations. A roll call at a CBMS meeting would include the venerable Mathematics Association of America (MAA), the American Statistical Association, the Society of Industrial and Applied Mathematicians, 5 mathematics education associations, and others. The purpose of CBMS is to promote research, improve education, and expand the uses of mathematics. We also serve an advisory function, regularly consulting for the President, Congress, and a host of national agencies. The presidents on this board represent the interests of our nation's most knowledgeable and invested experts in the field. You have before you an open letter with the signatures of the member presidents in full support of the mathematics standards in the Common Core. Further their support is not limited to signatures you see before you, these 16 associations are each engaged in ongoing work to create resources in support of the schools, teachers, and students working to implement CCSS.

In each of these settings (workshops and professional meetings), the energy and enthusiasm focused on supporting the work of implementing the Common Core provides us with tangible evidence of widespread belief in the efficacy of the CCSS. The stories also offer us dramatic examples of the not so visible ways in which consensus around these standards has stimulated and mobilized educators both in Michigan and across the country to work together in support of students. My colleagues in mathematics education and I believe that these collaborative efforts are likely to support greater mathematics achievement. Already, the list of free high-quality resources available for teachers is impressive, and more are scheduled for release each month.

As a lifelong member of Michigan's mathematics education community I have seen no fewer than five entirely new sets of Michigan standards. Each time I was faced with the challenge of implementing these standards, making sense of the new content, locating textbooks, aligning local assessments, and adjusting teaching strategies with support from no farther a field than my colleagues down the hall.

For the first time in my 40+ years, these consensus standards have sparked powerful and productive collaborations among the mathematics community in Oakland, in Michigan, and across our nation. Effectively one sustained conversation with the common goal of helping every child in our land learn mathematics—exactly the goal that our former Governor John Engler and other members of NGA had in 2007 when they called for the creation of a set of core standards common across states. As a math teacher who personally understands what it means to face the challenge of raising scores for every child in a classroom of students who struggle with mathematics, I want to encourage you to stay the course and to join my colleagues and I as we embrace this opportunity to leverage the intellectual resources of a nation in support of Michigan's children.

Respectfully Submitted,

Valerie L. Mills
Supervisor, Mathematics Education Consultant, Oakland Schools
Immediate Past President, National Council of Supervisors of Mathematics

1221 Westmoorland
Ypsilanti, MI 48197